Serial No.: 10/822,612 Filed: April 12, 2004

Page : 2 of 10

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions and listings of claims in the application:

<u>Listing of Claims</u>:

1. (Currently amended) A method of analyzing retrieving information responsive to the content of an incoming electronic message (IEM), the method comprising:

classifying the IEM using query-based classification to select at least one category that relates to the content of the IEM, wherein classifying the IEM using query-based classification comprises:

receiving information about the content of an incoming electronic messages (IEM);

scheme defining links among at least one root category and a plurality of sub-categories such that each sub-category connects through one of the links as a child category of one of the root categories or another one of the sub-categories, wherein each link is associated with a predefined question, and wherein each selected category connects to at least one of the root categories through a series of the links for which each associated predefined question evaluates as true for the received information about the content of the IEM; and

classifying the IEM using an example-based classification algorithm to search through a set of stored previous electronic messages, each stored previous electronic message being associated with at least one of the selected categories, to identify at least one stored previous electronic message that relates to the content of the IEM; and

retrieving from a data storage element one or more business objects associated with at least one of (i) the selected categories and (ii) the identified previous electronic messages.

2. (Original) The method of claim 1, further comprising identifying at least one business object that is associated with the selected category.

Serial No.: 10/822,612 Filed: April 12, 2004

Page : 3 of 10

3. (Original) The method of claim 2, further comprising recommending the identified at least one business object.

- 4. (Original) The method of claim 1, further comprising identifying at least one business object that is associated with the identified stored previous electronic message.
- 5. (Original) The method of claim 4, further comprising recommending the identified at least one business object.
- 6. (Original) The method of claim 1, wherein classifying the IEM using query-based classification comprises:

evaluating content of the IEM using pre-defined queries associated with each of a plurality of pre-defined categories in a categorization scheme; and selecting a category for which one of the pre-defined queries evaluates as true.

7. (Original) The method of claim 1, wherein classifying the IEM using an example-based classification algorithm comprises:

comparing the IEM with the set of stored previous electronic messages; and determining which stored previous electronic messages in the set of stored previous electronic messages are most similar to the IEM.

8. (Original) The method of claim 1, further comprising: identifying at least one business object that is associated with the selected category; and identifying at least one business object that is associated with the identified stored previous electronic message.

Serial No.: 10/822,612 Filed: April 12, 2004

Page : 4 of 10

9. (Original) The method of claim 8, further comprising recommending business objects that are associated with both the selected category and the identified stored previous electronic message.

- 10. (Original) The method of claim 8, further comprising recommending business objects that are associated with at least one of the selected category and the identified stored previous electronic message.
- 11. (Original) The method of claim 1, wherein the IEM is an e-mail.
- 12. (Original) The method of claim 1, wherein the IEM is received via Internet self-service.
- 13. (Original) The method of claim 1, further comprising the step of providing a recommendation based on both the selected category and the identified at least one stored previous electronic message.
- 14. (Original) The method of claim 1, wherein the example-based classification algorithm is a k-nearest neighbor algorithm.
- 15. (Original) The method of claim 1, wherein the example-based classification algorithm is a support vector machine algorithm.

Serial No.: 10/822,612 Filed: April 12, 2004

Page : 5 of 10

16. (Currently amended) A computer program product tangibly embodied in <u>a storage device</u> an information carrier, the computer program product containing instructions that, when executed, cause a processor to perform operations to <u>retrieve information responsive to analyze</u> the content of an incoming electronic message (IEM), the operations comprising:

elassify the incoming message to select at least one category that relates to the content of the IEM by using query-based classification, which comprises operations to select one or more categories in a categorization scheme, the categorization scheme defining links among at least one root category and a plurality of sub-categories such that each sub-category connects through one of the links as a child category of one of the root categories or another one of the sub-categories, wherein each link is associated with a predefined question, and wherein each selected category connects to at least one of the root categories through a series of the links for which each associated predefined question evaluates as true for the received information about the content of the IEM; and

classify the IEM using an example-based classification algorithm to search through a set of stored previous electronic messages, each stored previous electronic message being associated with at least one of the selected categories, to identify at least one stored previous electronic message that relates to the content of the IEM; and

retrieve from a data storage element one or more business objects associated with at least one of (i) the selected categories and (ii) the identified previous electronic messages.

Serial No.: 10/822,612 Filed: April 12, 2004

Page : 6 of 10

17. (Currently amended) A system for responding retrieving information to respond to incoming electronic messages (IEM), the system comprising:

a processor; and

a memory containing instructions that, when executed by the processor, cause the processor to perform operations, the operations comprising:

a content analysis engine that uses query-based classification to
receive information about the content of an incoming electronic messages (IEM);
identify one or more nodes in a categorization scheme in which links between
nodes are defined among at least one root node and a plurality of sub-nodes, each sub-node being
connected through one of the links as a child node of one of the root nodes or another one of the
sub-nodes, wherein each link is associated with a predefined question, and wherein each
identified node is connected to at least one of the root nodes through a series of the links for
which each associated predefined question evaluates as true for the received content information;

select at least one category that relates to the content of the IEM, and

use uses an example-based classification algorithm to search through a set of stored previous electronic messages, each stored previous electronic message being associated with at least one of the identified categories a selected categories;

[[to]] identify at least one stored previous electronic message that relates to the content of the IEM; and

retrieve from a data storage element one or more business objects associated with at least one of (i) the identified nodes and (ii) the identified previous electronic messages.